## PATENT COOPERATION TREATY

# INTERNATIONAL PRELIMINARY REPORT ON PATENTA (Chapter II of the Patent Cooperation Treaty)

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(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 12239081/ARS	FOR FURTHER ACTION	See Form PCT/IPEA/416					
International application No. PCT/AU2004/000500	International filing date (day/mont) 15 April 2004	h/year) Priority date (day/month/year) 17 April 2003					
International Patent Classification (IPC) or	national classification and IPC						
Int. Cl. <sup>7</sup> E04D 13/072							
Applicant HIGGINS, Brian, John							
1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.							
2. This REPORT consists of a total of 3	sheets, including this cover sheet.						
3. This report is also accompanied by ANNEXES, comprising:							
a. X (sent to the applicant and to the International Bureau) a total of 5 sheets, as follows:							
sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).							
sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.							
b. (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)), containing a sequence listing and/or table related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).							
4. This report contains indications relating	to the following items:						
X Box No. I Basis of the report	t .	·					
Box No. II Priority							
Box No. III Non-establishmer	nt of opinion with regard to novelty	inventive step and industrial applicability					
Box No. IV Lack of unity of i	nvention						
X Box No. V Reasoned statement citations and expl	Box No. V  Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement						
Box No. VII Certain defects in	Box No. VII Certain defects in the international application						
Box No. VIII Certain observation	ons on the international application						
Date of submission of the demand	pletion of the report						
21 January 2005	10 March	·					
Name and mailing address of the IPEA/AU	Authorized C	Officer					
AUSTRALIAN PATENT OFFICE							
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### INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/AU2004/000500

Box	No. I	Basis of the report				
1.	With reg	gard to the language, this report is based on the international application in the language in which it was filed, unless se indicated under this item.				
		This report is based on translations from the original language into the following language, which is the language of a translation furnished for the purposes of:				
		international search (under Rules 12.3 and 23.1 (b))				
		publication of the international application (under Rule 12.4)				
		international preliminary examination (under Rules 55.2 and/or 55.3)				
2.	With regard to the elements of the international application, this report is based on (replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report):					
		international application as originally filed/furnished				
	X the	description:				
		pages 4-5 as originally filed/furnished  pages* 1-3 received by this Authority on 15 February 2005 with the letter of 15 February 2005				
		pages* received by this Authority on with the letter of				
	X the	claims:				
		pages as originally filed/furnished				
		pages* as amended (together with any statement) under Article 19				
	pages* 6-7 received by this Authority on 15 February 2005 with the letter of 15 February 2005 pages* received by this Authority on with the letter of					
	X the drawings:					
		pages 1/3-3/3 as originally filed/furnished pages* received by this Authority on with the letter of				
		pages* received by this Authority on with the letter of				
	as	equence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing.				
3.		e amendments have resulted in the cancellation of:				
		the description, pages				
	the claims, Nos.					
	the drawings, sheets/figs					
	the sequence listing (specify):					
		any table(s) related to the sequence listing (specify):				
4.	ma	his report has been established as if (some of) the amendments annexed to this report and listed below had not been ade, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule .2(c)).				
		the description, pages				
		the claims, Nos.				
		the drawings, sheets/figs				
		the sequence listing (specify):				
		any table(s) related to the sequence listing (specify):				
*	If item	4 applies, some or all of those sheets may be marked "superseded."				
	-,					

#### INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/AU2004/000500

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1.	Statement	atement				
	Novelty (N)	Claims 1-6	YES			
		Claims NIL	· NO			
	Inventive step (IS)	Claims 1-6	YES			
		Claims NIL	NO			
	Industrial applicability (IA)	Claims 1-6	YES			
		Claims NIL	NO			

#### 2. Citations and explanations (Rule 70.7)

The invention of the claims is a mounting bracket for a gutter of a channel shape with an internal wall with a gutter mounting thereon, the bracket having an elongated shape with an attachment section for attaching to a building and a gutter mounting section having a plurality of retaining clips along this section such that when the bracket is attached to a building the clips are aligned to correspond to the fall required for the installed gutter, the clips being adapted to cooperate with the gutter mounting to retain the gutter in position.

The citation does not disclose such a retaining bracket incorporating a predetermined gutter fall.

The closest art is AU 32112/71 in which a bracket has extending portions on which a gutter rests but does not retain the gutter.

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#### **GUTTERING**

This invention relates generally to guttering for buildings and the like and to components therefor.

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One form of currently known guttering includes a channel shaped body which is adapted to be mounted to a building by a series of separate support brackets. A problem associated with existing guttering is that it is a relatively time consuming task to mount the guttering to the building because of the requirement that the guttering has a proper fall enabling water in the guttering to be directed to the down pipe. This requires the setting of a string line at the desired fall angle and thereafter mounting brackets correctly so that the channel will follow the fall line.

It is an object of present invention to provide improvements to guttering which alleviates one or more of the aforementioned disadvantages.

According to one aspect of the present invention there is provided a mounting bracket for a gutter for buildings, the gutter including a generally channel or trough shaped body for collecting water with an internal wall having a gutter mounting thereon, the mounting bracket including an elongated bracket body which includes an attachment section which is attachable to the building and a gutter mounting section, the gutter mounting section including a plurality of gutter retaining clips arranged along the gutter mounting section the arrangement being such that when the bracket is attached to the building the clips are aligned so as to correspond to a fall required when the gutter is in an installed position the retaining clips being adapted to cooperate with the gutter mounting to retain the gutter in the installed position.

In one preferred form, the elongated bracket body includes a generally U-shaped portion one leg thereof being the attachment section and the other leg thereof being the gutter mounting section. Preferably, the legs of the U-shaped portion are spaced apart so as to provide a recess therebetween for receiving part of the internal wall of the gutter

therein when the gutter is in the installed position.

The gutter support elements or retaining clips may, in one form include projections which extend into the recess and are adapted to cooperate with the mounting means on the internal wall of the gutter so as to retain the gutter in the installed position. The mounting means on the internal wall of the gutter may be in the form of a raised elongated rib which in the installed position is disposed within the recess and inhibited from removal by said projections. Preferably, the projections are hook-like elements pressed or punched out of the gutter mounting section.

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The mounting bracket may further include a plurality of access apertures in the gutter mounting section for providing access to the attachment section when it is being attached to the building.

Preferred embodiments of the invention will hereinafter be described with reference to the accompanying drawings and in those drawings:

Figure 1 is a schematic isometric illustration of a gutter mounting bracket according to one preferred embodiment of the present invention;

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Figure 2 is a schematic side view of the bracket shown in Figure 1 and a gutter in an installed position.

Figures 3 and 4 are side views of gutter mounting brackets according to other embodiments of the present invention;

Figure 5 is a schematic view of a gutter suitable for use with the brackets shown in Figures 3 and 4;

Figures 6 and 7 are schematic views of a bracket and gutter according to another embodiment of the invention; and

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Figures 8 and 9 are schematic views of a gutter and bracket according to further embodiments of the invention.

Referring to Figures 1 and 2 there is shown a mounting bracket 10 for a gutter 20 for buildings. As shown in Figure 2 the gutter 20 includes a generally channel shaped body 22 for collecting water with an internal wall 23 having mounting means 24 thereon. The mounting bracket 10 includes an elongated bracket body 12 which includes an attachment section 14 which is attachable to the building which as shown in this example is fascia 60 and a gutter mounting section. It could be also attached to other parts of the building such as the wall or rafter. The gutter mounting section including a plurality of gutter support elements retaining clips arranged along the gutter mounting section and aligned so as to correspond to a fall required when the gutter is in an installed position.

The elongated bracket body includes a generally U-shaped portion one leg thereof being the attachment section 14 and the other leg thereof being the gutter mounting section 15. The legs of the U-shaped portion are spaced apart so as to provide a recess 13 therebetween for receiving part of the internal wall of the gutter therein when the gutter is in the installed position. The free end 17 of gutter mounting section 15 is inclined with respect to the plane of the section providing a lead-in guide when installing the gutter.

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The gutter support elements or retaining clips include projections 26 which extend into the recess 13 and are adapted to cooperate with the mounting means on the internal wall of the gutter so as to retain the gutter in the installed position. The mounting means on the internal wall of the gutter is a raised elongated rib 24 which in the installed position is disposed within the recess and inhibited from removal by said projections. Because section 15 extends well into the gutter when installed this reduces the prospect of uplift of the gutter. Furthermore, if desired, high tensile rods 28 may be provided at spaced intervals along the gutter for increased stability.

The projections are hook-like elements pressed or punched out of the gutter mounting section. A plurality of access apertures 27 are provided in the gutter mounting section for providing access to the attachment section when it is being attached to the

#### THE CLAIMS:

- 1. A mounting bracket for a gutter for buildings, the gutter including a generally channel or trough shaped body for collecting water with an internal wall having a gutter mounting thereon, the mounting bracket including an elongated bracket body which includes an attachment section which is attachable to the building and a gutter mounting section, the gutter mounting section including a plurality of gutter retaining clips arranged along the gutter mounting section the arrangement being such that when the bracket is attached to the building the clips are aligned so as to correspond to a fall required when the gutter is in an installed position the retaining clips being adapted to cooperate with the gutter mounting to retain the gutter in the installed position.
- 2. A mounting bracket according to claim 1 wherein said elongated bracket body includes a generally U-shaped portion one leg thereof being the attachment section and the other leg thereof being the gutter mounting section, the legs of the U-shaped portion being spaced apart so as to provide a recess therebetween for receiving part of the internal wall of the gutter therein when the gutter is in the installed position.
- 3. A mounting bracket according to claim 2 wherein the gutter retaining clips include projections which extend into the recess and are adapted to cooperate with the mounting means on the internal wall of the gutter so as to retain the gutter in the installed position.
- 4. A mounting bracket according to claim 3 wherein the mounting means on the internal wall of the gutter is a raised elongated rib which in the installed position is disposed within the recess and inhibited from removal by said projections.
- 5. A mounting bracket according to claim 3 or claim 4 wherein said projections are hook-like elements pressed or punched out of the gutter mounting section.
- 6. A mounting bracket according to any one of claims 2 to 5 further including a plurality of access apertures in the gutter mounting section for providing access to the

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attachment section when it is being attached to the building.